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AUG 30 1995

Winston-Salem
Regional Office

AUGUST 24th, 1995

**CLOSURE OF 1-10,000, 1-5000 & 2-1000 GALLON UNDERGROUND
STORAGE TANKS (USTs) BY EXCAVATION**

**SITE: PEP-CO SERVICE STATION
FACILITY ID #0-001473
US HWY 29 BUS. @ OREGON HILL ROAD
REIDSVILLE, ROCKINGHAM COUNTY**

**PREPARED FOR: MR ED DANIELS
P.O. BOX 546
RUFFIN, NC 27326-0543**

**PREPARED BY: CERTIFOAM SERVICES, INC./
SALEM ENVIRONMENTAL, INC.
P.O. BOX 5535
WINSTON-SALEM, NC 27113-5535
800/862-9231 // 910/661-9231
910/661-9241 (FAX)**

**HARVEY DANNER, PROJECT MANAGER
ANDREW RARING, Ph.D., P.G., CONSULTING
GEOLOGIST**

**Salem Environmental, Inc./
Certifoam Services, Inc.
P.O. Box 5535
Winston-Salem, NC 27113-5535
800/862-9231 // 910/661-9231
910/661-9241 (Fax)**

August 24th, 1995

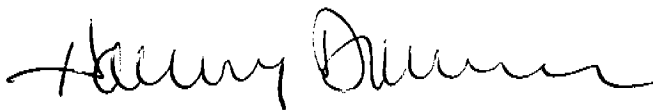
NC-DEHNR/DEM
Groundwater Section
585 Waughtown St.
Winston-Salem, NC 27107-2241

Dear Staff:

Enclosed is the closure report for the site listed on the cover of this report. Based on the field and laboratory data, Mr Raring felt a clean closure had been achieved.

We, the undersigned, attest that our work was carried out with full respect to regulatory guidance and, where such guidance was not applicable, standard industry procedures. The data received from the independent lab is assumed to be accurately delineated and transposed. Should we find otherwise, we reserve the right to alter this report as necessary. The assessment applies to the time and place of sampling only; no other expressed or implied warranty is offered. This report is the exclusive property of Mr Ed Daniels, and it will not be released without prior approval.

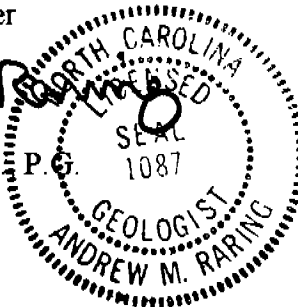
Sincerely,



Harvey C. Danner, Jr.
President/Project Manager



Andrew M. Raring, Ph.D. P.G.
Senior Geologist



eddaniel.doc

UNDERGROUND STORAGE TANK CLOSURE REPORT

The closure report should contain, at a minimum, the following information. Any other information that is pertinent to the site should be included.

I. General Information

A. Ownership of UST(s)

1. Name of UST owner: Ed Daniels
2. Owner address and telephone number: P.O. Box 546, Ruffin, NC 27326
910/939-2843

B. Facility Information

1. Facility name: Pep-Co Service Station
2. Facility ID #: 0-001473
3. Facility address, telephone number and county: Business 29 North @ Oregon Hill Rd.,
Reidsville, NC 27320

C. Contacts

1. Name, address, telephone number and job title of primary contact person:
Ed Daniels (same address as above), owner
2. Name, address and telephone number of closure contractor:
Salem Environmental, Inc./Certifoam Services, Inc.
P.O. Box 5535, Winston-Salem, NC 27113-5535
910/661-9231 : 910/661-9241 (Fax)
3. Name, address and telephone number of primary consultant:
Andrew Raring, Ph.D., P.G.
P.O. Box 34, Bethania, NC 27101-0034
910/661-9245
4. Name, address, telephone number, and State certification number of laboratory:
Specialized Assays, Inc. (NC License #387)
P.O. Box 40566
Nashville, TN 37204-0566
615/726-0177

D. UST Information

Tank no.	Installation dates	Size in Gallons	Tank Dimensions	Last Contents	Previous Contents (if any)
1	5/14/57	1000	4' x 10'6"	gasoline	
2	5/14/57	1000	4' x 10'6"	"	
3	5/14/57	5200	7' x 18'	"	
4	5/14/57	10000	10'6" x 16'	"	

E. Site Characteristics

1. Describe any past releases at this site: None known of
2. Is the facility active or inactive at this time? If the facility is inactive note the last time the USTs were in operation: Inactive since 1981
3. Describe surrounding property use (for example, residential, commercial, farming, etc.)
Residential, with commercial across the railroad to the east
4. Describe site geology/hydrogeology
The 1985 N.C. Geologic Map shows bedrock to be an inequigranular to megacrystic biotite gneiss which is interlayered with varied schists as well as other rocks. It resides in the Milton Belt of the Piedmont Physiographic Province.

II. Closure Procedures

- A. Describe preparations for closure including the steps taken to notify authorities, permits obtained and the steps taken to clean and purge the tanks:

Prior to closure by removal, each UST was checked with a Gastech Model 1238 Organic Vapor Analyzer (OVA). Concentrations of explosive fumes were all below 10%. Authorities were notified by letter approximately six weeks prior to closure.

- B. Note the amount of residual material pumped from the tank(s):

Tanks were pumped of approximately 7,000 gallons of water, which was disposed of by L & M Environmental of Sedalia, NC.

- C. Describe the storage, sampling and disposal of the residual material:

Please refer to II.B. above.

D. Excavation

Note: Refer to the "Groundwater Section Guidelines for the Investigation and Remediation of Soils and Groundwater" on limiting excavations. The Trust Fund will not pay for excessive excavation unless it is justified and verified by laboratory results.

1. Describe excavation procedures noting the condition of the soils and the dimensions of the excavation in relation to the tanks, piping and/or pumps:

No notable odors were noted by Anthony Medina or David Edes of SE/CS during removal. The excavation at the 10,000/5,000 was 26' x 23' x 10-13' deep. At the 2-1,000's it was 14' x 16' x 7' deep.

2. Note the depth of tank burial(s) (from land surface to top of tank):

10,000: 8"; 5,000: 13"; 1,000's: 16"

3. Quantity of soil removed: approximately 200-200 cubic yards, none notably impacted

4. Describe soil type(s): 0-0.5': silt topsoil; 0.5-6': orange-tan sandy silt, micaceous;
6-13': tan saprolite, micaceous
5. Type and source of backfill used: clean silty clay, from Mr Daniels' land

E. Contaminated Soil

Note: Suspected contaminated soil should be segregated from soil that appears to be uncontaminated and should be treated as contaminated until proven otherwise. It should not be used as backfill.

1. Describe how it was determined to what extent to excavate the soil:
Enough to remove the USTs; OVA levels were all sufficiently low to not stockpile.
2. Describe method of temporary storage, sampling and treatment/disposal of soil: N/A

III. Site investigation

A. Provide information on field screening and observations, include methods used to calibrate field screening instrument(s): Soil was screened for volatiles with a Gastech Model 1238 Organic Vapor Analyzer (OVA). The process involves placing soil into a ziplock type bag (about 1/4 to 1/3rd its volume), sealing the bag and allowing 10 to 15 minutes for the soil gasses to equilibrate. Then, the probe from the OVA is inserted into the bag. The subsequent reading, expressed in parts per million of total organics, can suggest if hydrocarbon contamination is present, especially when coupled with a petroleum odor of any kind.

B. Describe soil sampling points and sampling procedures used, including:

Note: Refer to the "Groundwater Section Guidelines for the Investigation and Remediation of Soils and Groundwater" for information about sampling requirements.

- Location of samples: Please refer to Figure 2
- Type of samples (from excavation, stockpiled soil, etc.): All from the excavation.
- Sample collection procedures (grab, split spoon, hand auger, etc.): Grab from the trackhoe bucket.
- Depth of soil samples (below land surface): 5,000: 10'; 10,000: 13'; 2-1,000s: 7'; pump island were at 3'.
- Whether samples were taken from side or floor of an excavation: Excavation floor.
- Sample identification: Chain of custody is enclosed; field ID's are the same as lab ID's.
- Sample analyses: Enclosed in the appendix.

C. Describe groundwater or surface water sampling procedures used, including: N/A

Note: Refer to the "Groundwater Section Guidelines for the Investigation and Remediation of Soils and Groundwater" for information about sampling requirements.

- Location of samples
- Sample collection procedures (grab, bailer, etc.)
- Sample identification
- Sample analyses

D. Quality control measures

- Describe sample handling procedures including sample preservation and transportation:
Disposable latex gloves were worn during sample collection to prevent cross-contamination. Soil was packed tightly into the glass jars supplied by the lab, which had teflon seal, screw caps. Temperature was maintained under 40 degrees by ice chest with a solid block coolant and refrigeration throughout our hold time.
- Describe decontamination procedures used: Decontamination of the hand trowel was per tap water/phosphate-free soap wash followed by a methanol rinse and drying period. Care was taken to avoid disturbing the soil excessively.
- Describe time and date samples were collected and date submitted to lab: Please refer to the chain of sample custody.
- Describe samples collected for quality control purposes (e.g. duplicates, field blanks, trip blanks, etc.) Include methods used to obtain these samples and analytical parameters. N/A
- Discuss how results of quality control samples may have affected your interpretation of soil, groundwater or surface water sample results: N/A

E. Investigation results

- Describe results of Site Sensitivity Evaluation (SSE), (if SSE was not conducted, explain why not):
Lack of quantifiable soil impact from lab data.
- Describe methods of analyses used (include U.S. EPA method number): EPA 5030-8015, Modified, Purge & Trap GC Method
- Describe analytical results for samples; discuss in relation to site specific cleanup level or action level, as appropriate: All tested under 10 ppm (parts per million). 10 ppm is the DEM threshold requiring additional action.

IV. Conclusions and Recommendations

Include probable sources of contamination, further investigation or remediation tasks, or whether no further action is required.

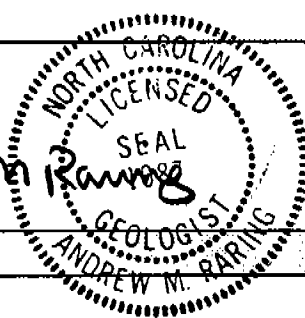
None necessary. It appears, based on the field and laboratory data, that a clean closure has been achieved.

V. Signature of Professional Engineer or Licensed Geologist

☐ Professional Engineer Registration #:

☒ Licensed Geologist License #: 1087

Andrew M. Raring



VI. Enclosures: Enclosed following this report body.

A. Figures

1. Area Map(s) (can be USGS Topographic Quadrangle) showing:
 - Adjacent streets, roads, highways with names and numbers
 - Buildings
 - Known distance to public water supply well(s)
 - Distance to known private water supply well(s)
 - Surface water bodies
 - Groundwater flow direction (if available)
 - Scale

- North arrow
- 2. Site map of UST excavation area drawn to scale, showing:
 - Buildings
 - Underground utilities such as sewer lines and other conduits
 - Orientation of UST(s), pumps, and product lines
 - Length, diameter and volume of USTs
 - Type of material(s) stored in USTs (currently and previously)
 - Sample locations (identified by letter or number)
 - Final limits of excavation
 - North arrow
 - Scale
- 3. Maps depicting analytical results, to include:
 - Orientation of UST(s), pumps, and product lines
 - Sample locations, depths, and identifications
 - Analytical results
 - Final limits of excavation(s)

B. Tables

1. Field screening results
2. Sample identifications, depths and analyses
3. Sample identifications with results and dates that samples were taken

C. Appendices

- Appendix A: Notification of intent to close (GW/UST-3)
- Appendix B: Site Investigation Report for Permanent Closure or Change-in-Service of UST (GW/UST-2)
- Appendix C: Certificate of tank disposal
- Appendix D: Soil, water, sludge disposal manifests
- Appendix E: Complete chain-of-custody records
- Appendix F: Copy of all laboratory analytical records
- Appendix G: Site Sensitivity Evaluation (SSE) (if applicable)
- Appendix H: Photographs of Closure Activities (optional)
- Appendix I: Geologic logs for excavation(s)

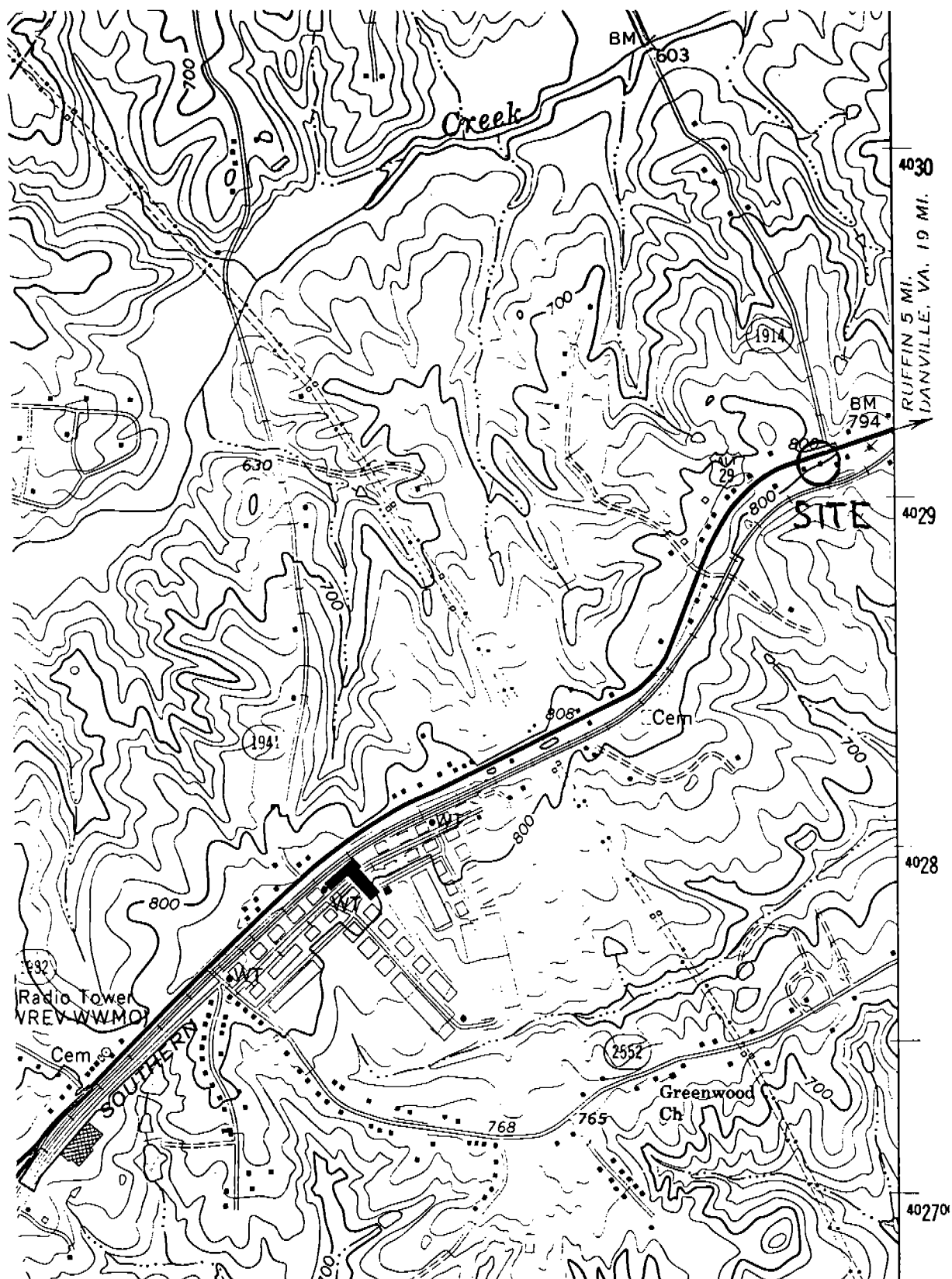


FIGURE 1-LOCATION MAP; ED DANIEL'S STORE

Business US Hwy 29, Reidsville, Rockingham County

USGS, SOUTHEAST EDEN, NC 7.5 minute topographic Quadrangle Map

SCALE: enlarged 141% from 1:24,000 (1" = 2000')



USTs INVENTORY

- #1 84" X 17.5' gasoline
- #2 126" x 16' gasoline
- #3 48" x 11' gasoline
- #4 48" x 11' gasoline

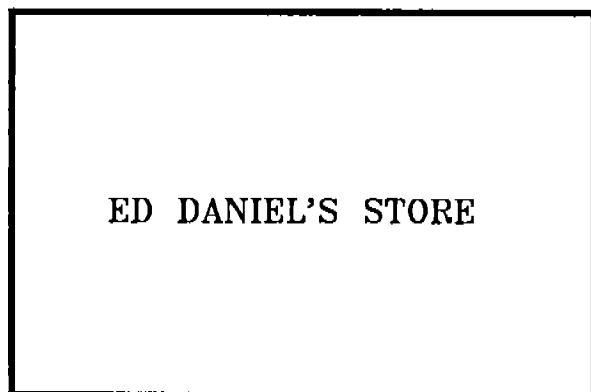
SOUTHERN Serves the South



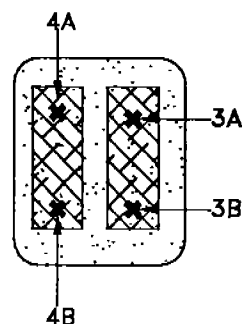
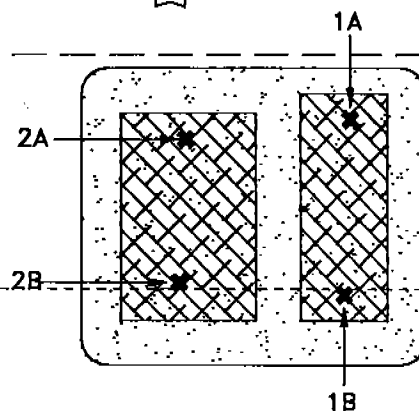
STEEP SLOPE



grass



ED DANIEL'S STORE



P1

P2

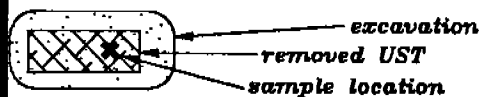
gravel



Business US 29

Oregon Hill Road

FIGURE 2-SITE MAP: ED DANIEL'S
bus HWY 29, Reidsville, Rockingham County



SCALE: 1" = 15'

SALEM/CERTIFOAM, Inc.

AUGUST, 1996



USTs INVENTORY

- #1 84" X 17.5' gasoline
- #2 126" x 16' gasoline
- #3 48" x 11' gasoline
- #4 48" x 11' gasoline

SOUTHERN Serves the South

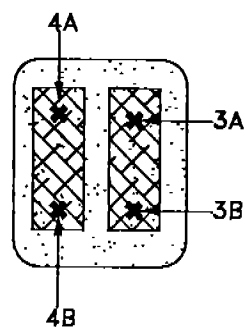
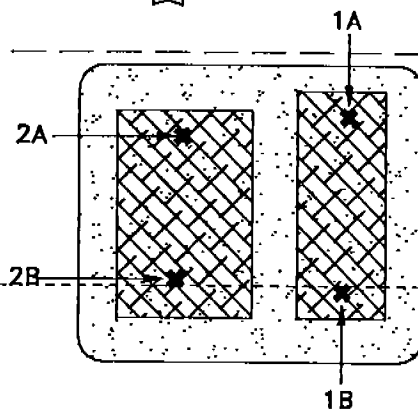


STEEP SLOPE



grass

ED DANIEL'S STORE



P1

P2

gravel



Business US 29

Oregon Hill Road

FIGURE 2-SITE MAP: ED DANIEL'S
bus HWY 29, Reidsville, Rockingham County



SCALE: 1" = 15'

SALEN/CERTIFOAM, Inc.

AUGUST, 1996

GW/UST-3

Notice of Intent: UST Permanent Closure or Change-In-Service

FOR
TANKS
IN
NC

Return Completed Form To:

The appropriate DEM Regional Office according to the county of the facility's location. [SEE REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL OFFICE ADDRESS].

State Use Only

I. D. Number _____

Date Received _____

INSTRUCTIONS

Complete and return five (5) working days prior to closure or change-in-service.

I. OWNERSHIP OF TANK(S)

Tank Owner Name: Ed Daniels
 (Corporation, Individual, Public Agency, or Other Entity)
 Street Address: P.O. Box 546
 County: Rockingham
 City: Ruffin State: NC Zip Code: 27326
 Tele. No. (Area Code): 910-939-2843

II. LOCATION OF TANK(S)

Facility Name or Company: Pep-Co Service Station
 Facility ID # (if available): 0-001473
 Street Address or State Road: Bus. 29
 County: Rock. City: Reidsville Zip Code: 27320
 Tele. No. (Area Code): _____

III. CONTACT PERSON

Name: Ed Daniels Job Title: Owner Telephone Number: 910-939-2843

IV. TANK REMOVAL, CLOSURE IN PLACE, CHANGE-IN-SERVICE

1. Contact Local Fire Marshall.
2. Plan the entire closure event.
3. Conduct Site Soil Assessments.
4. If Removing Tanks or Closing in Place refer to API Publications 2015 "Cleaning Petroleum Storage Tanks" & 1604 "Removal & Disposal of Used Underground Petroleum Storage Tanks".
5. Provide a sketch locating piping, tanks and soil sampling locations.
6. Fill out form GW/UST-2 "Site Investigation Report for Permanent Closure" and return within 30 days following the site investigation.
7. The site assessment portion of the tank closure must be conducted under the supervision of a Professional Engineer or Licensed Geologist. After January 1, 1994, all closure site assessment reports must be signed and sealed by a P.E. or L.G.
8. Keep closure records for 3 years.

V. WORK TO BE PERFORMED BY:

(Contractor) Name: Certi-farm Services / Salem Environmental
 Address: P.O. Box 5535; Winston-Salem, NC Zip Code: 27113
 Contact: Harvey Danner Phone: 910-661-9231
 Primary Consultant: Andrew Raving, Ph.D., Ph.D. Phone: 910-661-9245

VI. TANK(S) SCHEDULED FOR CLOSURE OR CHANGE-IN-SERVICE

TANK ID#	TANK CAPACITY	LAST CONTENTS	PROPOSED ACTIVITY		
			CLOSURE		CHANGE-IN-SERVICE
			Removal	Abandonment In Place	New Contents Stored
<u>1</u>	<u>1000</u>	<u>Gasoline</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<u>2</u>	<u>1000</u>	<u>"</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<u>3</u>	<u>5000</u>	<u>"</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<u>4</u>	<u>10000</u>	<u>"</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	

VII. OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE

Print name and official title

Harvey Danner; President, SE/CS*Scheduled Removal Date: July 25th, 1994Signature: Harvey DannerDate Submitted: July 22nd, 1994

*If scheduled work date changes, notify your appropriate DEM Regional Office 48 hours prior to originally scheduled date.

FOR
TANKS
IN
NC

Return Completed Form To:

The appropriate DEM Regional Office according to the county of the facility's location.
[SEE MAP ON REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL OFFICE ADDRESS].

State Use Only

I.D. Number _____

Date Received _____

INSTRUCTIONS

Complete and return within (30) days following completion of site investigation.

I. Ownership of Tank(s)

Owner Name: Ed Daniels
 Corporation, Individual, Public Agency, or Other Entity: _____
 Street Address: P.O. Box 546
 County: Rockingham
 City: Ruffin State: NC Zip Code: 27326
 Telephone Number: (910) 939-7843
 (Area Code)

II. Location of Tank(s)

Facility Name: Pep-Co Serv. Station
 (or Company) _____
 Facility ID # (if available): 0-001473
 Street Address: US Bus 29 N.
 (or State Road) _____
 County: Rock. City: Reidsville Zip Code: 27320
 Telephone Number: () _____
 (Area Code)

III. Contact Person

Name: Ed Daniels Job Title: Owner Tel. No.: 910/939-7843
 Closure Contractor: Certiform SCS. Address: POB 5535, W-5, NC 27113 Tel. No.: 910/661-9231
 Primary Consultant: Andrew Raring Address: POB 34, Bethania, NC 27010 Tel. No.: 910/661-9295
 Lab: Specialized Assays Address: POB 405-46, Nashville, TN 37249 Tel. No.: 615/726-0177

IV. U.S.T. Information

V. Excavation Condition

VI. Additional Information Required

Tank No.	Size in Gallons	Tank Dimensions	Last Contents	Water in Excavation		Free Product		Notable Odor or Visible Soil Contamination	
				Yes	No	Yes	No	Yes	No
1	1000	4'x10'6"	Gasoline		✓		✓		✓
2	1000	"	"		✓		✓		✓
3	5000	7'x18'	"		✓		✓		✓
4	10000	10'6"x17'	"		✓		✓		✓

See reverse side of pink copy (owner's copy) for additional information required by N.C. - DEM in the written report and sketch.

NOTE: The site assessment portion of the tank closure must be conducted under the supervision of a Professional Engineer or Licensed Geologist. After Jan. 1, 1994, all closure site assessment reports must be signed and sealed by a P.E. or L.G.

VII. Check List (Check the activities completed)

PERMANENT CLOSURE (For Removing or Abandoning-In-place)

- ☒ Contact local fire marshal.
☒ Notify DEM Regional Office before abandonment.
☒ Drain & flush piping into tank.
☒ Remove all product and residuals from tank.
☒ Excavate down to tank.
☒ Clean and inspect tank.
☒ Remove drop tube, fill pipe, gauge pipe, vapor recovery tank connections, submersible pumps and other tank fixtures.
☒ Cap or plug all lines except the vent and fill lines.
☒ Purge tank of all product & flammable vapors.
☒ Cut one or more large holes in the tanks.
☒ Backfill the area.
 Date Tank(s) Permanently closed: Aug. 10th, 1995
 Date of Change-in-Service: _____

ABANDONMENT IN PLACE

- ☐ Fill tank until material overflows tank opening.
☐ Plug or cap all openings.
☐ Disconnect and cap or remove vent line.
☐ Solid inert material used - specify: _____

REMOVAL

- ☒ Create vent hole.
☒ Label tank.
☒ Dispose of tank in approved manner. Safe way
 Final tank destination: Tank, Colfax

VIII. Certification (Read and Sign)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

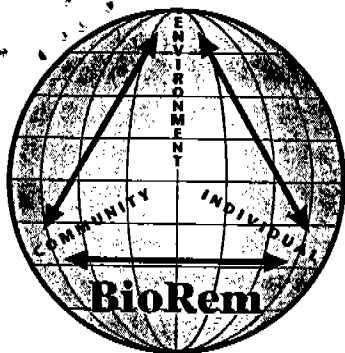
Print name and official title of owner or owner's authorized representative

Signature

Date Signed

Harvey Danner, Pres; CertSas.

Aug 28th, 1995



BIOREMEDIATION RESEARCH, LTD.

ROUTE 2, BOX 180-C

PINNACLE, NC 27043

PHONE (910) 325-2318

CERTIFICATE OF ANALYSIS

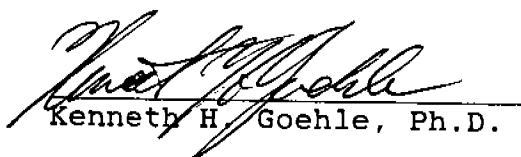
August 14, 1995

NC Cert. # 480

Client: Salem Environmental
Project: Ed Daniels

EPA 5030/M8015 TPH-GC; Gasoline

Client Sample	Lab Sample	TPH(5030)
1A-10-ED	9500958	< 10 ppm
1B-10-ED	9500959	< 10
2A-13-ED	9500960	< 10
2B-13-ED	9500961	< 10
3A-7-ED	9500962	< 10
3B-7-ED	9500963	< 10
4A-7-ED	9500964	< 10
4B-7-ED	9500965	< 10
P-1-3-ED	9500966	< 10
P-2-3-ED	9500967	< 10


Kenneth H. Goehle, Ph.D.

CHAIN OF CUSTODY RECORD

Use ballpoint pen only, press hard

BIOREMEDIATION RESEARCH, LTD.

1720 Vargrave Street
Winston-Salem, NC 27107
Telephone (919) 631-9104 Fax (919) 631-9102

Client Name: Salem Environmental
Project: Ed Daniels
Attention: Harvey Danner
Telephone: (910) 661-9231

Please indicate the number of each size of sample container and any preservatives which were used. e.g., 2-HNO3 indicates 2 containers w/ nitric acid.										Suspected Contaminant	Level			Analysis Requested	Lab use only Lab ID	
Sample ID	Yr.	Date	Time	Matrix	40 ml	120 ml	250 ml	500 ml	950 ml		other	0	Low			Med
1A-10-ED	8/95	8/9	11:50	Soil						1-402		✓			5030 TPH	958
1B-10-ED	8/95	8/9	12:00													959
2A-13-ED	8/10	8/10	10:15													960
2B-13-ED	8/10	8/10	10:20													961
3A-7-ED	8/10	8/10	10:40													962
3B-7-ED	8/10	8/10	10:45													963
4A-7-ED	8/10	8/10	11:00													964
4B-7-ED	8/10	8/10	11:05													965
D-1-3-ED	8/9	8/9	2:15													966
D-2-3-ED	8/9	8/9	2:20													967
Relinquished by: (Sig.) <u>Carly Madeline</u> Collector										Date	Time	Remarks:				
Relinquished by: (Sig.)										Date	Time					
Relinquished by: (Sig.)										Date	Time					